

COMMENTS

The enclosed is responsive to the Examiner's Office Action mailed on October 23, 2002. At the time the Examiner mailed the Office Action claims 1 through 48 were pending. By way of the present response the Applicant has: 1) amended claim 37; and, 2) added new claims 49 through 60. As such, claims 1 through 60 are currently pending. No new matter has been entered. The Applicant respectfully request reconsideration of the present application and the allowance of claims 1 through 60.

Rejections under 35 USC 112, paragraph 1

The Examiner has rejected each of claims 1 through 48 under 35 USC 112, paragraph 1 as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. The Examiner stated in support for this theory of rejection only that “[t]erms such as ECR, utility factor, transport device speed, queue depth, are not defined to illustrate the functionality of that term.”

The Applicant respectfully submits that each of the specific terms brought forth by the Examiner (i.e., “ECR”; “utility factor”; “transport device speed”; and, “queue depth”) would be understood by those of ordinary skill in light of their usage within the Applicant’s specification and their understood meanings within the art. As a consequence, the Applicant respectfully submits that the Examiner’s rejection is in error.

With respect to the term “ECR”, note that the term ECR has been explicitly defined at page 4, line 11 of the present application as an “equivalent cell rate”. The equivalent cell rate is a parameter, expressed as a “bandwidth” term (e.g., some amount of data per unit time (cells/sec; bits/sec;, etc.)), that

provides some indication of the load that the establishment of a requested connection will present to a network. Expressing the offered load of a requested connection as a bandwidth term is a convenient way to assist a decision process that decides whether or not the requested connection should be accepted or rejected. Here, note that the Shaw reference (U.S. Pat. No. 5,917,804), the "Gibbens and Hunt reference" (first cited by the Shaw reference at Col. 2, lines 24 – 26 of Shaw), and the "Guerin reference" (first cited by the Shaw reference at Col. 2, line 64 – Col. 3, line 1 of Shaw) each discuss the use of a bandwidth parameter to describe a requested connection's offered load. That is, the C1 and C2 "bandwidths" of the Shaw invention (described from Col. 6, line 3 through Col. 8, line 30 of Shaw), the "effective bandwidth" of the Gibbens and Hunt reference (described at Col. 2, lines 36 – 48 of Shaw), and the "fluid flow approximation" of the Guerin reference (described at Col. 3, lines 45 – 49 of Shaw) each correspond to a representation of the offered load of a new connection as a bandwidth term. Given the prevalent use of bandwidth terms in the prior art as a device for assisting a decision process that decides whether a new connection should be accepted or rejected, the Applicant respectfully submits that the ECR term of the Applicant's claims would be properly understood to be a bandwidth term by those of ordinary skill. As such, the Applicant respectfully submits that the Examiner's rejection is in error.

With respect to the term "utility factor", the Applicant respectfully submits that the term "utility factor" does not appear in the Applicant's claims. If the Examiner means that the Applicant's written description is lacking with respect to the claimed term "utilization factor", the Applicant respectfully submits that the meaning of the term "utilization factor" would be perfectly understood by those of ordinary skill. Across a wide range of different sciences, the term "utilization factor" is understood to mean a parameter that indicates the degree to which resources are being used. In its most common usage, a "utilization factor" is the percentage of resources being used expressed as a decimal (e.g., a utilization factor of 1.00 means that 100% (i.e., all) of the resources are being utilized, a utilization factor of 0.50 means that 50% of the resources are being utilized, a

utilization factor of 0.00 means that 0% (i.e., none) of the resources are being utilized. Because the term “utilization factor” is well understood by those of ordinary skill, the Applicant respectfully submits that the Examiner’s rejection is in error.

With respect to the term “transport device speed”, note that the term “transport device speed” is described at Page 9, lines 6-7 of the Applicant’s specification as including the “port or trunk speed”. Here, the speed of a port or trunk are well understood by those of ordinary skill to describe performance features of a network’s underlying networking equipment. Because some representation of the performance capabilities of the underlying networking equipment should be factored into a decision as to whether or not a new connection should be carried by a network, those of ordinary skill would understand the term “transport device speed” as invoking such a representation. As such, the Applicant respectfully submits that the Examiner’s rejection is in error.

With respect to the term “queue depth” the Applicant respectfully submits that this term is one of the most basic of all terms used in the field of Computer Science. In the field of networking systems (which is considered to be a branch of Computer Science), a queue is most often used as a storage device that temporarily holds traffic flow elements (e.g., packets, cells, frames, portions thereof, etc.). The depth of a queue relates to “how many” traffic flow elements can be stored within the queue. If the total amount of traffic flow elements that need queuing at a particular instant of time exceeds the depth of the queue used to temporarily hold these traffic elements, the queue “overflows” resulting in loss of the traffic elements (which, in turn, corresponds to communication over the network being “dropped”). Given that a decision to accept or reject a connection may be based upon the depth of a queue used to temporarily hold that connection’s traffic elements, the Applicant respectfully submits that those of ordinary skill would understand the meaning of the term “queue depth” and its

relation to the Applicant's claims. As such the Applicant respectfully submits that the Examiner's rejection is in error.

Rejections under 35 USC 103

The Examiner has rejected each of claims 1 through 48 under 35 USC 103 as being unpatentable over the Shaw reference. "To establish a *prima facie* case of obviousness ... the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP 2143.

The Applicant respectfully submits that the Shaw reference fails to teach or suggest "an admission decision for the connection request based on the estimated ECR and the estimated measured utilization factor" as recited in each of the Applicant's independent claims 1, 13, 25, 37, and 49. The Examiner is invited to read the discussion provided in the preceding section regarding the terms "ECR" and "utilization factor". Here, it is clear that the Shaw only teaches an admission decision based on a pair of bandwidth terms; whereas, the Applicant claims an admission decision based on a bandwidth term (ECR) and a utilization factor.

The teachings of Shaw that are nearest those of Applicant's claims merely describe a process in which: 1) a first bandwidth term "C1" (described from Col. 6, line 63 through Col. 8, line 5 of Shaw) and a second bandwidth term "C2" (described from Col. 8 lines 6 through 30 of Shaw) are calculated; and, 2) a decision is based upon the above described bandwidth terms (See, Figures 4 and 6 of Shaw and their corresponding discussion found at Col. 8 lines 51-54 and Col. 8 line 64 – Col. 9, line 7 of Shaw). Because the bandwidth terms are used as a basis for the decision, Shaw does not disclose that a utilization factor is used as a basis for decision. Here, it is relevant to note that the Col. 6, lines 32 – 45 of Shaw merely describe (when viewed in a light most favorable to the Examiner's position) an approach where utilization is accounted for with a "virtual bandwidth" that is calculated with a "cell loss model". As such, a bandwidth term rather than a utilization factor is taught by Shaw as being the basis for any decision.

The Applicant therefore respectfully submits that each of independent claims 1, 13, 25, 37 and 49 are patentable over the Shaw. As such, the Applicant respectfully requests the allowance of claims 1 through 60.

The Applicant respectfully submits that the present application including all claims is in condition for allowance and respectfully requests the allowance of same. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Robert O'Rourke at (408) 720-8300.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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